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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

VITAL, P

ART UNIT

PAPER NUMBER

2186

DATE MAILED:

11/07/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
09/280,796

Applicant(s)

Lewis et al.

Examiner

Pierre Vital

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Sep 28, 2001
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirements.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some\* c) ☐ None of:

- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 20) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office Action is in response to applicant's communication filed September 28, 2001 in response to PTO Office Action dated May 18, 2001. The applicant's remarks and amendment to the specification and/or the claims were considered with the results that follow.
2. Claims 1-14 have been presented for examination in this application. In response to the last Office Action, no claims have been amended. No claims have been canceled or added. As a result, claims 1-14 are now pending in this application.
3. The objection to the drawings has been withdrawn due to the amendment filed September 28, 2001.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claims 1, 2, 5, 8, 9 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Valizadeh (US5,838,994).

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As per claims 1 and 8, Valizadeh discloses a buffer pool further comprised of an amount of fixed storage and an amount of virtual storage [col.2, line 53 - col.3, line 5]; a buffer manager for dynamically varying the amount of fixed storage and the amount of virtual storage based on a comparison of present usage of the amount of fixed storage and the amount of virtual storage to target values [col.3, lines 6-11; col.5, lines 32-52].

As per claims 2, 5, 9 and 12, Valizadeh discloses a buffer pool comprising a plurality of buffers logically partitioned into three states: fixed, pageable and released [col.5, lines 23-31]; said buffer pool comprising both fixed and virtual storage [col.2, line 53 - col.3, line 5].

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 4, 6, 7, 10, 11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valizadeh (US5,838,994) and Yoshimoto et al. (US5,862,409).

As per claims 3, 6, 10 and 13, Valizadeh discloses the claimed invention as detailed above in the previous paragraphs. However, Valizadeh fails to specifically teach a buffer index

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table comprising buffer index elements wherein each entry represents one buffer in the pool as recited in the claims.

Yoshimoto discloses a buffer index table comprising buffer index elements wherein each entry represents one buffer in the pool [Col.8, Lines 32-51].

It would have been obvious to one of ordinary skill in the art, having the teachings of Valizadeh and Yoshimoto before him at the time the invention was made, to modify the system Valizadeh to include a buffer index table wherein each entry represents one buffer in the pool because it would have provided effective system management by monitoring all changes to the extent of the buffer capacity as taught by Yoshimoto.

As per claims 4, 7, 11 and 14, Yoshimoto discloses said buffer index elements further comprise a buffer state information field which represents the logical partition where the buffer resides and a pointer field to the next available buffer in the same state within the buffer pool [Col.8 , Lines 33-35].

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

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***Conclusion***


9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach varying fixed and virtual storage in a buffer, buffer partitioning and buffer index table.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre M. Vital whose telephone number is (703) 306-5839. The examiner can normally be reached on Monday to Friday 8:30 A.M. to 6:00 P.M., alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim, can be reached on (703) 305-3821. The fax phone numbers for the organization where this application or proceeding is assigned are:

After Final (703)746-7238, Non-Official (703)746-7240 and Official (703)746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

  
Pierre M. Vital

  
Matthew M. Kim  
Supervisory Patent Examiner

November 5, 2001